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THE INFLUENCE ON BUSINESS OF THE INDEPENDENT TREASURY.

In the investigation of this subject it is both desirable and necessary to confine our attention to recent years. It is desirable, because, with the exception of about a decade following its establishment, the last ten or twelve years are the only ones in which the Sub-Treasury system has operated in a way that may be called normal ; that is, under conditions which have not interfered with the working of its machinery. It is necessary, because the industrial and commercial character of the present period of normal activity of the Independent Treasury is essentially different from that of its former period ; and also because the Sub-Treasury as it exists to-day is a very different institution from what it was forty years ago.

For many years after the adoption of the system, the annual receipts and expenditures of the government were approximately equal. At least there was no large surplus to deal with such as for many years past has been one of the most prominent features of our national financing. This is an important consideration. For the influence exerted, on the amount of the circulating medium for example, by a government which keeps its own money, must be very different from what would prevail under other conditions. Moreover, for another considerable number of years, the country was under a régime of paper money, issued under circumstances that constituted a practical reversal of the policy of complete "divorce of bank and State" which was the central doctrine of the Independent Treasury when first established ; so that the Treasury is not now "independent" even to the extent of keeping all its own money. Again, whatever influence

such a system would have, must have been largely increased, if not changed in character, by the growth of the fiscal operations of the government, by the industrial and commercial development of the country, and especially by the tremendous growth of credit which the last generation has witnessed.

When the system was established the receipts of the government were about \$1,000,000 a week. So unimportant was the influence of the government operations for some years after 1846, that, in the words of Professor Sumner,* "the bankers and merchants could afford to laugh at the insignificance of the government on their arena."

Now, the Treasury "is the largest manipulator of money in the country." Commerce has multiplied many times, and there is a greater solidarity of business interests, due to improved means of communication, and a correspondingly greater sensitiveness.

Moreover, as already said, the functions of the Independent Treasury have themselves changed, both in extent and nature. "The duties of the sub-treasuries," said Treasurer Jordan in 1886, "have changed since the passage of the laws authorizing the issue of the various kinds of certificates of exchange, and redemption of the silver coinage and paper currency of the country. Each Sub-Treasury is now a bank of issue and redemption. Whether such functions," he adds, "should be performed by these offices is a grave question."[†]

In addition to its intended duties of receiving and disbursing government money, the Independent Treasury now discharges the following functions also : First, it issues notes, like a bank, and it protects these notes by keeping a reserve whose ratio to the notes issued approximates that usually kept by the banks ; second, it receives deposits, and issues therefor certificates, which pass from hand to hand as money, and it keeps a deposit from which to cash the checks of dis-

* History of American Currency, p. 167.

† Treasurer Jordan, on proposed Sub-Treasury at Louisville. Senate Committee Reports, No. 1834. Vol. II. Second Session 49th Congress

bursing officers ; third, the issue of government paper necessitates the duty of redemption by the Treasury as by banks, redemption, that is, in the sense of the exchange of one kind of money for another ; and it also acts as agent of the national banks for the redemption of their notes ; fourth, the Independent Treasury transfers money for individuals from one part of the country to another, free of charge or at less cost than can be done, for example, by the banks ; and, finally, it has by the law of July, 1890, been charged with the work of a silver bullion broker. These powers of the Independent Treasury must be borne in mind in seeking to determine the nature and extent of its influence on the business of the country to-day.

It may seem, at first thought, that this influence might be directly traced ; that prices and the rate of interest might be shown to vary with the absorptions and disbursements of money by the Treasury, and that thus there might be shown to exist between business and the fiscal machinery a connection so close as to amount to a demonstration of the influence of the latter. Unfortunately, however, this cannot be done ; for large amounts of money may be withdrawn from circulation without any apparent effect on the rate of interest, or on business. This is possible because under our currency system the volume of money which constantly remains in our channels of industry is nearly a maximum ; that is, the amount which is needed and used when business is most active. This, again, occurs because our currency is inelastic ; its contractions and expansions are not to any great extent in response to the needs of business ; it is not self-adjusting. Hence, when business is dull there is a large inactive volume of money which may be withdrawn without affecting the business situation. Accordingly, we find that the amount of money in the vaults of the Treasury increases sometimes when prices are rising, and sometimes when they are falling ; on some occasions when the rate of interest tends upwards, and on others when it tends downwards ; in some instances when business is brisk, and in some when it is dull ; at

times when gold is being exported, and at times when it is being imported. In fact, these phenomena occur in all possible combinations.

Still another reason why prices do not show response to changes in the amount of money caused by Treasury withdrawals and disbursements is found in the widely extended use of credit. Credit instruments of one sort and another perform a very large, perhaps the larger, part of our exchanges. Prices will, therefore, depend more on variations in the amount of credit than of the money in circulation.

Moreover, the elements that enter into the determination of prices are so numerous, so variable, and sometimes so obscure, that we cannot eliminate those which are not material to the problem of finding the causes of variation at a given time. The effect of any one of these numerous elements may in one case be much greater than in another, and yet it may not so appear because the other elements have also varied in the meantime. Direct proof of the effect of the Sub-Treasury on prices is, therefore, impossible. The same is true of variations in the rate of interest. So far as they are caused by the Independent Treasury, they are due to the changes affected by it in the amount of loanable capital. No direct connection can, however, be shown, because variations in the amount of loanable capital are not the only cause of variations in the rate of interest. Loanable capital may diminish while the rate of interest falls, the effect of the diminution of capital being more than offset by other causes, which, however, are undetermined, and cannot, therefore, be eliminated. The relations between prices, rate of interest, loanable capital, and the operations of the Treasury, are, in fact, exactly such as could be represented by a combination of forces acting at a single point. We may, by observation, determine the amount and direction of the resultant, but that will tell us nothing of the individual forces. To see whether each tends, we must imagine it acting alone, and infer the results of its single action. This is one of the cases which occur so often in social and econo-

mic investigations, whose limitations prevent a satisfactory application of inductive methods, and make it necessary to rely largely on deduction. We must begin by assuming, what all admit, that prices and the rate of interest depend partly on the amount of loanable capital, as represented by the amount of money offered in the money market, and partly also on the extent of the use of credit. We must, then, first examine the phenomena of the Sub-Treasury considered by themselves, and afterwards consider how its influence is modified by other forces.

The influence of the Treasury on business is exerted mainly through its action, direct or indirect, on the purchasing medium of the country. If we disregard the small number of transactions which take place by direct barter, we may look on the purchasing medium of the country as a compound of credit, including instruments of credit, and money. It may be fairly assumed that at any given moment the purchasing medium, or the "money power," of the country is a definite quantity, the amount needed to perform the exchanges that take place. It may vary, owing to a change in the amount of money, or of credit, or of both. Any external cause varying the total purchasing medium, by changing either the volume of credit or the amount of money in circulation, will tend to act on prices. The amount of the compound purchasing medium required for transacting business being definite at any selected time, if the volume of credit remain constant, a sudden diminution of the amount of money in a market will tend to lower prices, or at least to prevent their rise. An increase in the amount of money would have the opposite effect. After each variation in the amount of money, prices would tend to settle to a new level determined by the new volume of the compound purchasing medium.

But because the volume of credit is, as a matter of fact, expandible or contractible, part of the effect of a variation of the quantity of the money element of the compound purchasing medium would be to augment or to diminish the

volume of the credit element. For the more money there is in circulation at a given moment the less need there is of credit operations; and the less money, the greater need. This is true, of course, on the supposition that the total compound purchasing medium is exactly what is needed to do the business of the country at the given time. And this supposition is a legitimate one, so long, at least, as the country is on a specie basis.

If, then, we suppose, as we fairly may, that the rapidity of circulation remains the same for a brief period, any cause varying the amount of money in a country affects business by acting on prices directly, through the change in the quantity of money; or indirectly, through its influence in inducing a change in the volume of credit. Prices would be affected even if we suppose, what in practice could hardly be realized, that the expansion in the volume of credit equaled the diminution in that of money, for prices are affected by the use of credit to a degree depending in part on its extent.

Now, the action of the Independent Treasury is such as to vary the amount of money in circulation. At one time it absorbs, at another disburses, considerable sums. There is nothing in the nature of the Sub-Treasury that makes its receipts and payments necessarily concomitant with a free and a stringent condition of the "money-market," respectively. Its action is, in the main, independent of either condition. That it must have a tendency to influence prices, depending on the extent of its absorption, retention, and disbursement of money is, therefore, clear.

For reasons already pointed out, it is difficult to show directly the connection between the action of the Sub-Treasury and variations in prices. The difficulty is still further enhanced by the fact that the withdrawal of money from circulation must continue some time before the contraction is shown in market quotations. But the evils of contraction are felt long before they become manifest in prices.

The following table shows the net receipts and disburse-

ments of the Sub-Treasury at New York from September, 1890, through June, 1891* :—

1890.	Net Receipts.	Net Disb'm'ts.	Net Gain	Net Loss.	Bal. of Gain.	Bal. of Loss.
September	67.5	102.2	. .	34.6	. .	34.6
October	80.6	73.7	6.9	. .	6.9	. .
November	51.6	50.8	1.7	.9	.8	. .
December	66.2	72.3	5.6	11.7	. .	6.1
1891.						
January	74.9	71.7	6.9	3.6	3.3	. .
February	55.9	45.0	10.8	. .	10.8	. .
March	56.4	60.8	8.6	. .	8.6	. .
April	71.7	77.3	. .	5.6	. .	5.6
May	118.6	121.5	.24	4.2	. .	3.99
June	82.6	95.5	. .	12.9	. .	12.9

In the ten months here represented, there was a continued variation in the amount of money in circulation due to the operations of the Sub-Treasury in New York.

So great an irregularity as these figures show in the supply of money cannot but have a tendency to render prices also irregular. Of course the effect of the spasmodic variation is felt first in speculation. But the influence of speculation on prices makes itself felt all through business, if the variations are more than what may be called momentary. Every business man who has outstanding debts secured by bonds or stocks as collateral has to provide additional security if his bonds or stocks depreciate under the speculative influence. In order to do so he may have to reduce his capital, or curtail his expenses, or sell his goods at a loss ; and the solidarity of business interests is such that the injury to one line of business will have a tendency to react unfavorably on others, and so affect a large part of the community or even of the country.

But of far greater importance than the tendency to influence prices by varying the supply of money directly, is the action of the Independent-Treasury system on business by means of its influence on credit through the medium of the bank reserves. It is not necessary to enlarge on the

* The figures were kindly furnished me by Mr. Maurice Muhleman, cashier of the New York Sub-Treasury.

magnitude and importance of credit operations in the business world to-day. The extent of their use is marvelous. According to the report of the Comptroller of the Currency for 1889-90, it appears that of the receipts of 3364 national banks on July 1, 1890, 7.50 per cent. was in coin and paper money, and 92.50 per cent. in checks, drafts, bills of exchange, and other instruments of credit. Corresponding figures for September 17, 1890, for 3474 national banks are 8.96 per cent. in "cash" and 91.04 per cent. in "checks, drafts and other substitutes for money." In New York City, the commercial centre of the country, on the last date given above, only .07 of one per cent. of the total transactions of forty-seven banks was in coin; 4.29 per cent. was in coin certificates, government and bank notes; and 95.64 per cent. was in checks, drafts, and other substitutes for money. Now this extensive use of credit is perhaps the most marked and important characteristic of the business methods of our industrial era. Credit is the most important means of business expansion and of industrial growth. Its destruction would mean the ruin of industrial development, the decrease of means of living, the checking of population, the stagnation of social life; in short, the stoppage of progress and the throwing back of the world to a more primitive type of civilization. It is the very life of modern society. Any cause that injures it, weakens it, or temporarily suspends it, is an economic and social evil. But the basis of credit in the business community is the money that makes up the bank reserves. "The whole case [of the influence of credit] it must be observed, rests on the *adequacy of the reserve*, and the reserve must be judged to be inadequate unless it be sufficient not only to meet every demand made upon it, but completely to eliminate all apprehensions on that point. Confidence in the adequacy of the reserve is the foundation of the vast superstructure of credit which is raised upon it, and confidence cannot be impaired without rudely shaking the sensitive fabric it supports."*

* Address of Mr. Charles Gairdner, General Manager Union Bank of Scotland, before the Institute of Scotch Bankers, quoted in *Bradstreet's*, December, 1890.

The bank reserves are, as it were, the base of an industrial structure, each succeeding layer of which is larger than the one below it, so that the business organization may be represented as an inverted pyramid with a very small base. Such a system is evidently in a condition of unstable equilibrium. But the industrial pyramid has a certain self-adjusted proportion of the parts. So long as the variations in the base are induced by, and therefore correspond to, variations in the other mutually dependent parts of the structure, the relative stability is unchanged. So long as the bank reserve, which is the base of the pyramid, adjusts itself to the legitimate demands of the business community, so long is there equilibrium, or no disturbance. But the slightest disturbance of the base threatens the whole structure. Any diminution of the bank reserve, independent of a corresponding decrease of credit, or any check on its expansion when the needs of business require an enlargement of credit, interferes with operations in every department of business activity. In other words, so small, relatively, is the bank reserve, that a comparatively slight change in its amount will check the whole market. The reserve banks are required by law to keep a minimum reserve of twenty-five per cent. of their deposits in coin and United States notes. This, then, represents the danger line in fluctuations of the reserve. Even a mere approach to it creates anxiety and distress in business.

The amount of the reserve varies, of course, with the amount of the cash deposits, and also, to a certain extent, with the amount of discounts, or loans. For a borrower at a bank seldom cares to withdraw the actual money. He borrows credit. The amount of the loan is credited to him on the books of the bank, and he draws on it as he needs it. No more money comes into the bank by this transaction; no money at all need pass from the bank to the borrower from the time of the contraction of the debt, even to that of its liquidation. Yet the transaction is equivalent to an increase of deposits, and necessitates an increase of reserve. If the reserve of the bank is already at the legal minimum,

the bank must get more money. If it cannot do so, it must contract its loans, or at least refuse further discounts, thus checking the market. When money is withdrawn from the banks, it must come out of the reserve, or cash actually on hand. But the money out of which the reserve must be maintained, and from which all actual withdrawals and cash loans must come, is the cash deposits. The "free" cash, that which the bank can pay out, is the difference between the cash deposits and the minimum, or legal, reserve. But the amount against which the bank must maintain a minimum reserve is composed of the cash deposits *plus credit deposits*, or loans left by borrowers in the bank. Evidently, therefore, the withdrawal of any sum of money from the bank must diminish the free cash and the reserve in a ratio larger than that which the amount withdrawn bears to the total deposit account. But if the amount withdrawn is in the current of business where the banks can again get at it, they, of course, can strengthen their position again immediately, and possibly could always keep well away from the danger line of a minimum reserve. If, however, they cannot recover the money let out, every withdrawal brings them nearer to this line.

Money withdrawn from the banks for export, or for the payment of customs dues, is thereby put out of the reach of the banks, for a time at least. In the former case a firm applies to the bank for gold certificates, exchanges them at a Sub-Treasury for gold, and ships the metal like any other commodity. Only a turn in the tide of international exchange can restore it to the country and the banks. If the money is used to pay customs dues it goes into the vaults of the Sub-Treasury. It is here as much out of the reach of the banks as when it is exported. For it will appear again only when the government has payments to make, or becomes a purchaser of its own bonds. If the payments of the government were sufficiently frequent, or if, better still, they had a resultant connection with the operations of the business community, no distress would be felt.

The following table shows the changes in the holdings of the New York Associated Banks for three months in 1890 due to the action of the Sub-Treasury and the interior movement of money, and also the changes in the total reserve.*

Week ending	Sub-Treasury action.	Interior Movement	Net gain (X) or loss. (—)	Variation in reserve.
Sept. 5, 1890.	X 1,600.†	— 3,289.	— 1,689.	— 52.
" 12, "	X 2,600.	— 3,310.	— 710.	— 3,193.
" 19, "	X 13,700.	— 4,411.	X 9,289.	X 6,895.
" 26, "	X 18,500.	— 3,933.	X 14,567.	X 16,384.
Oct. 3, "	X 4,500.	— 5,781.	— 1,281.	X 1,020.
" 10, "	— 2,100.	— 4,752.	— 6,852.	— 9,924.
" 17, "	— 2,500.	— 3,468.	— 5,968.	— 4,311.
" 24, "	— 2,300.	— 2,038.	— 4,338.	— 964.
" 31, "	— 700.	— 2,290.	— 2,990.	X 207.
Nov. 7, "	— 900.	— 533.	— 1,433.	— 4,254.
" 14, "	X 200.	X 1,129.	X 1,329.	X 292.
" 21, "	X 700.	— 1,190.	— 490.	— 300.
" 28, "	X 300.	— 514.	— 214.	

It is evident from the figures that there is no causal connection between supplies of money from the Sub-Treasury and the demand from the interior points of the country, so that the drain on the banks by the interior movement may or may not be relieved by supplies of money from the Treasury. Sometimes the two movements are in the same direction, either towards or away from the banks, and so intensify each other; and sometimes they partially neutralize each other. Through the month of October the demand for money from the interior continued active, but the banks were hindered in supplying it by the steady absorptions of the Treasury. Through September the demand was more than offset by the Sub-Treasury disbursements, but not steadily. In November the government payments partly offset and partly increased the drain on the banks caused by the interior demand. It would be rash to say that if the Sub-Treasury had not existed the banks would have met the demands for money more easily. Under ordinary cir-

* The table is compiled from the weekly returns of the *Commercial and Financial Chronicle*. The x sign means gain to the banks, and the — sign loss.

† 000 omitted throughout.

cumstances, certainly, under ordinarily good management, they should be able to anticipate the regular autumn draft. But in a period of stringency like that which existed in the fall of 1890, the case might be different. If there had been no Sub-Treasury and the banks had had the money held there, they would of course have loaned it and some of it, without doubt, would have been difficult to call in when the pinch came. The Sub-Treasury interposed a barrier to free lending and held the money for a time of greater need.

The diminution of the bank reserves by the Sub-Treasury diminishes the money basis of credit and thereby at times makes credit more difficult to obtain. But at the same time the withdrawal of money from circulation necessitates a larger resort to credit in the attempt to prevent the reduction of business transacted ; that is, one part of the compound purchasing medium being diminished, the other must enlarge to maintain the same volume of business. Thus the tendency of the action of the Sub-Treasury is to diminish one basis of business activity—the money available for loans—and so to compel a resort to the other basis—credit ; while at the same time, and by the same action, it reduces the opportunities for getting credit. The result is a check on business expansion, perhaps an actual reduction of business activity. It has been said that if the government would pay its debts so as to avoid having a surplus on hand the evil effects of the Independent Treasury in alternately contracting and expanding the currency would not occur. This statement can hardly hold ; it overlooks the characteristic feature of the system, namely, its irregularity of action. The receipts of the government flow into its vaults in a continuous stream, while payments are periodic.

It receives money every day, but the bulk of its payments is made every three months. It must gather *beforehand* a sufficient amount to meet its payments. That means that for three months money is being withdrawn from circulation, and that at the end of the quarter it is thrown back into circulation and into the banks all, or

nearly all, at once. In this *irregularity* of action on the money market lies the harm of the system. If it be said that the payments made by the government at the end of every three months amount to a small sum compared with the total circulating medium, and therefore cannot have any important effect on business, the argument is conclusively answered by the evidence of experience. In the first place, it cannot be admitted that the disbursements of the government are so insignificant as the above statement seems to assume. In one month they may be small, in another large. Observing the gains and losses of money by the Sub-Treasury at New York, for six months in 1890, we find that the net disbursements varied from over \$34,000,000 in September, to less than four in November. The former sum is about one-third the usual reserve of the associated banks of New York City, and it is through them that the bulk of the payments is ultimately made. In the two weeks from the twelfth to the twenty-sixth of September, 1890, the weeks which saw the heaviest government payments of the month, the cash holdings of the banks rose from 92.4 millions of dollars to 115.6 millions. This increase of twenty-three millions was in spite of the shipment of 8.3 millions to the interior.

To assert that such additions to loanable funds will not materially affect business is to assume that, other things being equal, the rate of interest in the money market will not vary with the amount of money accessible to borrowers, and that the banks will voluntarily keep idle in their vaults more money than is necessary for conservative banking. The average weekly gain of the banks from the Sub-Treasury operations in October, 1891, was over five millions of dollars, and in November over two millions. The result of such increase in the money accessible to business is a fall in the rate of interest on short loans, and at least a tendency to a local inflation in prices. Mr. Edward Atkinson asserts* that the removal of but 10 per cent., or \$30,000,000 of lawful

* *Bradstreet's*, Dec., 1890.

money from bank reserves checked three billion dollars' worth of business transactions. Even if not prepared to admit the accuracy of this ratio, and although it is true that a given amount of contraction will disturb business much less at one time than another, we must still admit that under some circumstances the effects of so large a contraction would be very injurious.

In the summer months, when business is dull, a large amount of money may, as we shall see, be accumulated in the Treasury, with no ill results because it is not needed then. "Contraction of the currency" is a healthy occurrence when business is dull, and in the absence, under our banking system, of a sufficiently self-regulating or "elastic" currency, the action of the Independent Treasury then, arbitrary though it be, is a good thing.

But even the smaller output of four or five millions of dollars may have an important influence on the market, especially if the bank reserves are very near the legal minimum, for contraction then, though apparently insignificant in amount, "may produce a most violent reaction in prices, disturbance in settlements, and disorder in almost every part of the societary movement." The following graphic description of some of the effects of a sudden contraction will illustrate the importance of government action in a sensitive condition of the money market:—

"Early in 1881 the business of the city of New York was disturbed by the passage of an act of Congress which alarmed the banking institutions. It matters not to the present purpose whether their alarm was reasonable or not; the point here to be considered is that it did in fact result in a speedy deposit of several millions of legal tenders with the Treasurer of the United States, in order to provide for the retirement of national bank circulation, and thus to secure the immediate surrender of the government bonds deposited as security. Orders for such deposits of legal tender came by telegraph and mail from banks in all parts of the country to their correspondents in New York. These orders required

that the money thus to be deposited should be taken from the sums standing to the credit of the country banks on the books of the banks in New York, and forwarded with as little delay as possible to the Treasurer of the United States.

It afterwards appeared that the amount of legal tenders thus deposited reached about \$17,000,000 within one week. This was a sudden, but not very large, contraction of the currency. The amount actually in use at the time, including all kinds of money, was not far from \$1,100,000,000, so that about $1\frac{1}{2}$ per cent. of the entire circulation was withdrawn at the chief centre of commerce. What was the effect? Immediately the banks which had been called upon to deposit money for the surrender of circulation took the required amount from their reserves. But at once, being required to make good those reserves, they sent out notices demanding the payment of loans on call. The persons thus called upon unexpectedly to pay sums which they had invested in securities rushed first to other banks and to brokers, seeking to effect new loans. As the cause was one which influenced at the same time the action of most of the leading banks of the city, a contraction of loans had been rendered necessary with nearly all the banks, and the apprehension of financial disaster had also led others to call in loans, as a precautionary measure, and had rendered all less disposed to put out more money on stock collaterals. As a consequence, in every direction it was found that the supply of money available for the purchase and carrying of stocks had suddenly shrunk. The holders were forced to go into the market to sell. . . . Accordingly, the market suddenly became one in which all wanted to sell, but nobody wanted to buy. . . . The inevitable consequence was a violent reaction, and the decline in prices within about one week was such that the aggregate market value of securities handled in New York was reduced fully \$200,000,000. [Of course, this was aided by the panicky fear of *future* evil.]

On the other hand, an illustration of almost weekly occurrence, during several years when the government was rapidly

reducing its indebtedness, will serve to show the effect of an inflation of the currency. On certain days each week, about 12 o'clock, messengers from many establishments in Wall street were waiting at the Sub-Treasury. An official brought out and posted a written notice, announcing that the government would redeem on a certain date bonds amounting to \$10,000,000. . . . Within five minutes orders began to pour into the exchange for the purchase of stocks. At the same time those who had stocks to sell were warned by their messengers to hold them at high prices. A sudden upward rush in prices occurred."*

In addition to the bad influence of the irregularity of the working of the Independent Treasury, harm arises also from the system in connection with the policy of surplus financing. By that policy a large amount of money collected in excess of the expenses of the government, is in effect withdrawn permanently from circulation. If every month the government has a surplus, a part of it, at least, must be continuously in the possession of the government. The effect is the same as if so much money were withdrawn from circulation permanently. The result must be that the country accommodates itself to this new monetary basis by a temporary fall of prices, unless the circulating medium is increasing under the influence of additional coinage with sufficient rapidity to prevent the fall.

Secretary Fairchild, writing of the surplus,† says: "The government provides, at large annual cost . . . that there may be a sufficient circulating medium in the hands of our people. . . . If we take into the Treasury large amounts of these circulating media in excess of what we pay out, there will soon not be money enough in the hands of the people for the purposes of business; serious derangement and disaster must follow, and a portion of labor must cease until the very evils which this wrong condition creates shall have worked a temporary cure by so diminishing

* "American Securities," Wm. M. Grosvenor. New York, 1885. Pp. 216-220.

† Report, 1887.

the consumption of food, clothing, fuel, and luxuries by the taxation of which the revenues of the government are raised, that taxes do not exceed the expenditures of government." Such a change in consumption as Secretary Fairchild describes would happen only in an extreme case; but it is the state of affairs which the Independent Treasury and the surplus together *tend* to bring about. To be sure, having a surplus is not an essential evil of the Independent Treasury system. The continual holding of a surplus by the government is a policy, not a system. But if a surplus were by some means kept in circulation subject to the call of the government, the evils of hoarding, at least, would be avoided. It is because it makes hoarding in the government vaults possible that the Sub-Treasury system adds to the evils of surplus financing.

The operations which have been described are those which would result under a system of government financial independence with disbursements made at considerable intervals, and with no reference to the condition of the money market or the demands of business. Such in principle is the Independent Treasury system of the United States. But the existence of the public debt and the almost constant possession of a surplus revenue have, under wise management by the various Secretaries of the Treasury, made it possible to prevent the occurrence of very serious disturbances from the influence of the system. If this influence had been unchecked there is no reason to think that the results would have been less evil than the opponents of the system prophesied at its inception. But there have been forces at work that have lessened the evils. The policy of the country in other lines, although these have been followed without any reference to the Independent Treasury, has been such as to prevent the system from bearing what would be its legitimate fruits if unchecked. The times of largest receipts from customs and of largest payments of interest and pensions, the currency, the silver purchases and the tariff, have all modified the working of the system of fiscal

independence to a greater or less extent. It has happened that some of these influences have prevented or lessened any evils that the Sub-Treasury might have caused.

In the first place, the tariff and the Independent Treasury have a certain connection. The receipts from customs are prohibited by law from being deposited in the banks. When, therefore, imports which are subject to taxation are heavy, considerable money is locked up. This, of course, if continued for a considerable period and if disbursements did not increase, would diminish the means of paying duties, and might strongly affect the money market and disarrange credit. According to Professor Taussig the tariff act of 1857 had in view the connection between the tariff and the Sub-Treasury. He says: "The tariff was passed with some hope that it would serve to prevent the (impending) crisis. Money was accumulating in the Treasury; and it was hoped that by reducing duties the revenue would be diminished, money would be got out of the Treasury, and the stringency, which was already threatening, prevented."^{*}

The reduction of the tariff has often been recommended as a means for preventing the withdrawal of money from circulation. But, as is evident from our examination of the subject, the relief which would thus be afforded would come solely from the abolition of a surplus revenue. This would not do away with the irregularities of action of the Sub-Treasury, which constitute the really evil feature of the system. A surplus, if it were constant, and fixed in amount, could be allowed for in business transactions. Its creation would cause a temporary contraction of the currency, but the currency and business would soon adjust themselves in harmony again and business would not be further disturbed so long as the surplus did not change. The existence of a *varying* surplus is most vicious. But the varying surplus is due to a varying revenue and this in turn to the varying needs of the government and the turns of business. But the reduction of the tariff so as to abolish the surplus, however

* "History of the Tariff," p. 118.

desirable for other reasons, would not do away with the evils caused by the Independent Treasury, because it would not make government receipts and expenditures any more regular.

The two institutions, tariff and Independent Treasury, are to a certain extent antagonistic, in so far, at least, as the tariff is for the purpose of raising revenue. For by locking up the customs receipts of one week and thereby reducing the money within reach for further payments, the Sub-Treasury will tend to check an importation movement sooner than it would cease if left to itself, and if our currency varied with the needs of business. So far, however, as the tariff is intended to check importation—so far, that is, as it is purely protective—its purpose harmonizes with the action of the Independent Treasury.

The working of the tariff may affect the Treasury through the relation which the government holds to the currency. The Treasury must always have on hand enough gold to maintain payments in that metal; that is, to insure the redemption of the United States notes and the silver certificates. But if imports were largely to exceed exports for a considerable time there would be a drain on the gold in the Treasury, and the officers of the government would have to take measures to replenish its stock of gold. This would "press" the banks and business, increase the scarcity of money, check discounts and raise the rate of interest, tend to depress prices, quicken exportation and check importation, and thus restore, on another level of prices, the equilibrium of demand and supply in business.

The method taken to replenish the gold reserves of the government would depend partly on the existence or non-existence of a current surplus. In either case, of course, gold could be purchased. With a surplus, silver certificates might be allowed to accumulate in the Treasury as was done in 1885.*

This would soon cause the receipts of the government to

* See Taussig's "Silver Situation in the U. S." *Public. of the Amer. Econ. Assoc.*, Vol. vii. No. 1., pp. 31, ff.

show a larger proportion of gold and so restore its reserve. If there were no surplus the Treasury would have to buy gold. Whichever policy were adopted, the time at which to pursue and to relinquish it would be for the Secretary of the Treasury to determine. His duty in such a case would have a certain likeness to the action of the Directors of the Bank of England in raising the rate of discount to check the export of gold. The object of both is to prevent the export of gold from going so far as to endanger the safety of their loans. Such interference in this country is very rare, and together with the exaction of a premium on gold bars for exportation in 1890, is the only means taken to prevent undue loss of gold.

The hardships caused by contraction of the currency by the Sub-Treasury at a period of heavy importation would be mitigated somewhat by the bonded warehouse system, whereby goods may be kept in bond and the duty paid at a later time. This system gives the money market time to prepare for the demands to be made on it.

It is needless, of course, to point out that the evils of contraction caused by the absorbing action of the Sub-Treasury, at a period of heavy importation, are followed in due course by the evils of expansion. These latter are likely to be less felt, however, than the former. For the contraction takes place when money is in demand. If the expansion takes place at such a time it eases the market; if at a time when business is dull, the money simply enters the volume of inelastic currency which lies inert in the channels of trade.

It has already been several times observed that there is, strictly speaking, no causal connection between the workings of the financial machinery of the government and the demand of business for money. Yet, strangely enough, the ill effects of the receipts and payments of the government in alternately contracting and enlarging the amount of money available for business purposes, have been modified, and to a certain extent diminished, by our peculiar currency system. Bad as that in some respects is, it must be credited with

some good in this direction. The chief defect of our monetary system is its inelasticity. The supply of money in the channels of trade is that which is needed when business is brisk and the demand for money is active and healthy. But there is not what might be called an automatic method of contraction whereby the amount of money in circulation quickly and easily becomes less when business becomes dull for short periods. Our circulating system is composed of gold and silver coins and certificates, United States notes, and national bank notes. The United States notes, or greenbacks, are, by law, fixed in amount; the silver through its paper representatives is, also by law, continually increasing; the gold would ordinarily diminish only by export for investment or for the settlement of international balances, and is not, therefore, contractible on the occasions under consideration; and the national bank notes grow less only by the slow and unimportant means of redemption at Washington as they wear out.* There is, then, abundant provision for currency expansion, but none for currency contraction. The only means whereby this process can take place is through the absorption and locking of money by the government. But this mode is of course, as already shown, purely arbitrary. Still it sometimes happens that the government locks up money at a time when there is a plethora in the market. The process cannot then do much, if any, injury; in fact it may be a source of relief to the banks. The monetary reservoir, so to speak, suffers less from loss through the arbitrary government withdrawals, because it is always kept at or near a maximum fullness. This inelasticity of the currency implies a social loss, by keeping afloat at times a larger amount of money than is necessary; but, on the other hand, it lessens the severity of contraction by the Treasury.

The times of the year when money is least needed and when it accumulates in the vaults of the banks, are, approximately, in January, the summer months, and towards the

* Of course the final retirement of the national bank notes is not a phase of the elasticity of the currency here intended.

end of October and the beginning of November. The plethora of currency in the summer is due: (1) to the semi-legal tender character conferred on national bank notes by the law which compels every bank to receive the notes of every other bank at par. The consequence of this is that the notes of the country banks are not sent home in the summer; (2) to that provision of the law whereby deposits in reserve cities count as reserve both for the reserve bank and for the country banks making the deposits; (3) to the payment of interest by the banks on deposits subject to call.

No one is benefited by the seasons of extreme ease; for as money accumulates in New York only because it is not wanted in the interior, the producing and mercantile classes outside of New York get no benefit from the low rates of discount which the accumulations produce. But when a stringency occurs, on the other hand, it generally affects all. The injury of the stringencies is not compensated by the ease of the money market at the times of great accumulation.

The customs receipts rise from May until September. This means, of course, that during the intervening months the government is locking up money and contracting the currency. This action must be a relief to the banks, especially in New York City, by withdrawing a part of the money which would otherwise have lain idle in their vaults. But, on the other hand, it must render the banks less able to meet the usual fall demand for money to "move the crops." And, indeed, in some years, as 1888 and 1889, "the crop movement and fall business have depended wholly upon the elasticity government disbursements have given the currency. . . . There was a time when the Treasury accumulated the idle currency in the summer months and disbursed it in the fall."* Hence, it has been necessary at many times to rely on the Treasury to supply the whole, or the greater part, of the money needed to keep up the bank reserves when they were being drained by the interior demand in the fall.

* *N. Y. Commercial and Financial Chronicle*, February, 1890.

If there had been no way except ordinary payments for the Treasury to let out again the money it had absorbed, evidently distress would have been caused. But two channels were open for the outflow. In the first place, the Treasury could purchase bonds, and this was the usual policy in the autumn for some years. But for the Independent Treasury the autumnal drain would all have fallen on the banks, and they were usually not very well prepared to meet it. There seems no reason to think that, as has sometimes been said, the banks carelessly depleted their reserves by discounting too freely in the summer months and that they were therefore unable to meet the drain in the fall.

The other method whereby the accumulations of the government could again be put within the reach of business was by depositing them in the banks. This policy has been followed, as we have already seen, to a greater or less extent according to the views of the different Secretaries of the Treasury. But as the premium on United States bonds has risen, it has not been profitable for the banks to buy them for deposit as security for government money committed to their care. Moreover, as the only public money that can legally be deposited in banks is that derived from internal revenue, it is possible that, in some cases, the receipts would come in so slowly that the banks would lose from having to deposit in advance bonds to a sufficient amount.

Still another preventive of stringency in the fall has been found in the timely occurrence of the heavy government payments for pensions and interest. Disbursements for these purposes often swelled at times when they could do great good. The pensions and the interest on the 4½ per cent. bonds of 1891 were payable in March, June, September and December. These disbursements were a source of monetary relief that could be depended on. The interest on the four per cents was paid in January, April, July and October. So far as the influence of these payments was concerned, that of October would continue the relief afforded by the September payments.

Now that the 4½ per cent. bonds have been paid, there will be no further relief from these interest payments in September. But since the redemption of these bonds it has happened that the financial condition of the government has changed. The receipts from customs have fallen off owing to the high rates of the McKinley tariff law, and the expenditures have largely increased, thus reducing the surplus and making income and outgo more nearly equal. The equalization of payments and receipts in the course of a year will not, however, as we have seen, prevent the financial operations of the government from exerting an influence on the money market. For it is still necessary for the Treasury to accumulate in advance a sufficient amount of money to make payments of interest and pensions quarterly. The irregularities of its operations, due to the public debt, will not, indeed, be so great as hitherto, yet they will be sufficient to cause occasional disturbance. The only interest payments of importance are those on the 4 per cent. bonds, due in January, April, July and October of each year. The January payments come at a time when the demand for money is slackened, and so money accumulates for a time in the banks, as is shown by the increase in their reserves. The April disbursements coincide usually with the demand for money for the spring trade, and are thus a positive help to the market. The outpour of July falls on a lethargic market and goes to swell bank reserves already usually larger than the banks desire at that season of the year. The October payment, as we have already noted, is timely in meeting the usual "fall demand."

The disbursements for pensions increased some eighteen millions of dollars for the fiscal year 1891, and will increase rapidly for some years to come. This increase will work to keep up the irregular influence of government financial operations in the money market, yet possibly to a less extent than hitherto. For a new policy in the payment of pensions has recently been adopted. Payment of pensions is made quarterly from each pension agency, as heretofore,

but not from all the agencies at the same time. Payment is made from some agency every month. The consequence is that payments of pensions are distributed more equably through the year, and therefore they will doubtless cause less disturbance in the future.

In its connection with the currency the Independent Treasury is the source of another danger. It is due partly to the existence of the Sub-Treasury system that the country has been forced into its present silver policy. The sentiment which brought about the effort of the government to "maintain" silver, could not have been so successful but for the fact that the Treasury is the keeper and disburser of its own money. If, for example, the transactions of the government had been conducted through a national bank as formerly, public opinion would never have permitted so long a period of irredeemable paper or a forced issue of depreciated silver. For the gain from them, whether real or imaginary, would have been, at least partly, secured by the bank. But the issue of notes by the government, and the forced issues of silver receive a certain support in popular opinion because the profits accrue to the government. It would have been possible, under a system that used banks as the issuing agents of the government, to secure most of this advantage while avoiding the incidental evils which the course pursued has produced. It is not meant, of course, that the policy actually pursued with reference to paper and silver would have been impossible under a national bank; but it would have been much less likely to be suggested or supported. So long as the government maintains a "bank" of its own, so long will its stockholders, the people, or a certain section of them, insist on doing for profit a banking business on the lines which, followed too far, inevitably bring disaster.

Under the Independent Treasury system the government must itself maintain the gold standard. But it can do so only if its receipts are in gold to a sufficient degree. Professor Taussig shows* that it has been saved from forced

* "The Silver Situation." *Public. of the Amer. Econ. Assoc.*, Vol. vii. No. 1.

silver payments only because the surplus revenue enabled it to accumulate gold. Now that the surplus is wiped out, this source of safety for the money standard is weakened and the difficulty of maintaining the standard will increase.

In another way still, the surplus has prevented the Independent Treasury from exerting the full effect which it would otherwise have had. While the surplus is to a certain extent chargeable with intensifying the contractions which the operation of the Treasury at times tends to produce, it has also afforded a means of relief when the acute stage of the demand for money has come. Without the public debt and without a surplus to redeem it, the Treasury could never have afforded the help in stringencies which it has so often given. But this very cure of the evils of contraction may be, to a certain extent, its cause. A surplus can exist only because money is taken out of circulation and locked up for future use. But this process means contraction. The evil effects of the surplus policy in contracting the currency are in some degree counteracted by the arbitrary enlargement of the circulating medium from the monthly additions of silver, and from other new coinage. But when disbursements come, inflation is rendered still greater by these additions.

If the currency of the country were wholly created by commerce for its own needs, adapted entirely to those needs, and possessing the elasticity which such a currency would have, the action of the Independent Treasury would be more clearly seen. In that case it would correspond more exactly with the absorptions and disbursements, diminutions and swellings, of the money in circulation, for short periods of time. The new coinage made in response to commercial demand, and the export and import of gold and silver, would still have to be allowed for. But the alternate issue and redemption of bank notes, under such a currency system as we suppose, would respond quickly to the variation in the demand caused by the Sub-Treasury, and so would reflect its action much more clearly.

In the few years just before the war, when the currency was more elastic, the action of the Sub-Treasury on the money in circulation must have been much more close and direct. But at that time the financial operations of the government were, comparatively, so small that the amount of its alternate subtractions from, and addition to the money afloat could not have done much harm. And since the war, as has been shown, its influence has been largely modified by causes, many of which, though they would be called bad if considered by themselves, have, as it were, so considerably offset the evils of one another as to produce a condition on the whole not very vicious.

Other causes which prevent the variations of the amount of money in the channels of commerce from corresponding with those of the government cash holdings, and have modified the influence of the Sub-Treasury, are the monthly injection of silver, the changes in the national bank circulation and the exportation or importation of gold. And even when allowance has been made for all these, the effects of new coinage and of hoarding would cloud the working of the system. The combined action of the silver issues, and the movement of the national bank notes, sometimes diminishes very much the contraction which government receipts would otherwise cause. For example, during October, 1890, the gain by the Sub-Treasury amounted to \$5,154,374. But not this amount was lost to commerce during that time. For during the month silver certificates were issued to the amount of \$5,880,000, and national bank notes were retired to the amount of \$2,114,142. The net gain in currency afloat from these last two movements was \$1,388,516, which deducted from the Sub-Treasury withdrawals leaves the net loss of money afloat \$1,388,516. If the changes in the currency were responsive to the demands of commerce, as they would be under a monetary system purely commercial instead of partly political, as ours is, the demand of business for money would still have been unsupplied, by just the amount of the Sub-Treasury withdrawals. Under

our system there are occasions when this may not be true. In the one cited, however, the demand for money was active because imports were rising to anticipate the operation of the McKinley tariff, and it is altogether likely that the whole increase of money during the month was needed, and would have been used, had the Sub-Treasury not put it out of reach.

On the contrary, it is clear that under other conditions—when, for instance, the demand for money is slack—the issue of silver to an amount greater than the national bank notes retired is not needed, and the Treasury absorption relieves the plethora of currency. But whichever way the changes may work there is no necessary connection between the money demand, the money supply, and the action of the Sub-Treasury ; that action is therefore just as likely to injure as to help the market for the time being.

The Independent Treasury also enhances the difficulty of the management of the public debt. The Secretary of the Treasury must proceed carefully so as to prevent the withdrawal of too much money for the accumulations from which to pay interest and to purchase bonds for the sinking fund. He must make his withdrawals and disbursements as equitable as possible.

The Independent Treasury, in connection with a surplus revenue, is responsible for the policy of forced debt payment. When the surplus grows large the Secretary of the Treasury is compelled to get rid of some of it by purchasing bonds, even though he must pay large premiums to do so. In 1889, for example, the secretary, receiving and disbursing nearly half a million dollars a day, had to find and buy one or two millions of bonds a week so as not to withdraw a dangerous amount of currency from commerce, A possible result of such purchases is to raise the price of the bonds so that it will not pay the national banks to deposit them as security for circulation ; and the consequence would be a retirement of bank notes and a contraction of the currency, or at least, a prevention of its expansion in a time of need.

The great cause of mischief in the Sub-Treasury system, as has already been emphasized, is in the fact that while the receipts of the government are daily, its payments occur only at intervals. If these intervals could be shortened sufficiently, the harm done might be made to disappear. If, for instance, the Treasury could pay its bills weekly, or even monthly, its influence on the money market would be far less. The chief items in the irregularity of the Treasury action are pensions, interest, and purchases of bonds for the sinking fund. With regard to pensions, a step has recently been taken in the right direction by paying part of them each month. But the great increase in the pension roll will neutralize, at least in part, the benefit that the change would otherwise produce. The interest payments are still made quarterly and money must be gathered for the purpose, and also for the purchase of bonds.

As the debt grows less the influence of these causes will decrease. If Congress could be said to have a definite financial policy, so that the action of one session could be looked on as indicative of its future course, we might infer from recent legislation that the irregularities due to debt payment will be less than hitherto. For the late drift of events—the enlargement of appropriations and the reduction of income by the McKinley tariff—might then be regarded as foreshadowing a period of slow debt reduction. This would preserve somewhat longer our national banking system, and would enable the government, if so it chose, to make a larger use of these banks as depositories, and the slower payment of the debt could be so adjusted as to cause less irregularity. But no such dependence can be put on Congressional legislation as to warrant an inference like this.

The causes which have modified the action of the Sub-Treasury have prevented the monthly variations in the net government holdings of cash from corresponding necessarily with the gain or loss of money to business from government operations. Hence, one set of changes cannot always be learned from the other. The difference between the two sets

of changes is often increased by the fact that the disbursements reported as being made in one month may not appear until the following month. The checks issued for pensions, for example, are some time in returning through the banks to the Sub-Treasury for payment. Meantime the money against them remains still in the vaults of the Treasury. The effect of large reported disbursements or absorptions may not appear, therefore, for some little time after they are nominally made. For example, in March, 1889, the decrease in the Sub-Treasury holdings was \$3,575,519; the decrease in depository bank holdings was \$986,743; total, \$4,562,262. Yet according to the monthly statement, the receipts of the Treasury were \$31,014,000; and the disbursements, \$17,383,-000. These figures make it appear that the Treasury *absorbed* \$9,139,000, whereas it actually had a *net loss* of \$4,562,262.

Thus we see that the evils which the Sub-Treasury might naturally be expected to produce have been largely neutralized by a series of lucky accidents, as it were. For it can hardly be claimed that the various parts of our financial system and policy have been framed with reference to one another so as to offset one another's ill effects and produce a system good on the whole. Several parts of that system are bad, notably the Independent Treasury in some of its influences, and our currency. Yet they have to a certain extent corrected one another. We can hardly expect, however, that the balancing of these influences against one another can continue in the future, nor would it be desirable that it should. It would be unscientific and dangerous to rely on mere contingencies for the prevention of financial evils, if we can see the defects in our system and provide a remedy.

Irregularities of absorption and disbursement cannot be prevented. They occur with all governments. It is not practicable for the government to pay its bills with sufficient frequency to prevent the locking up of considerable sums for periods long enough to affect the market, especially

when it is sensitive. This feature of temporary withdrawals of money is inherent in the "independent" system of government management of its own receipts, and renders impossible the prevention of the evils which arise from contractions and expansions of the currency, independent of the state of trade. Some method of keeping the public money should therefore, be sought which will do away with these evils.

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